

appropriate to a 1 Hazardous Fragment in 600 Square Feet MSD with a minimum separation distance of 200 feet.

Based on the assumption the an OE expansion protocol were needed adjacent to sector 3A or 3B, and the item located at the edge of the sector was not larger than a 60MM mortar or 37MM projectile used as the MPM for the sectors, a 200 feet MSD should continued to be used for intrusive work in these areas. An appropriate MSD will need to be calculated for intentional detonations. Engineering controls can be employed during intentional detonations to reduce the blast distance.

Conclusions and Recommendations:

1. Public safety must be a leading concern for the interested parties and the Corps of Engineers in proceeding with the OE response. Public officials, public safety personnel, UXO workers, and public living and working near the site must be made aware of the hazards and responses being made to reduce them.
2. The maximum fragmentation distance calculations for the 37 MM and 60 MM MPM's (if this were a Corps of Engineers project) would be that of 1181 feet and 1080 feet, respectively. Sectors 3A and 3B would be appropriate for reduction of the MSD to a 1 Hazardous Fragment in 600 Square Feet MSD based on the MPM being unfuzed and unarmed. The reduction to a 1 Hazardous Fragment in 600 Square Feet MSD is an increased risk to the public that must be assumed by those officials approving the adoption of this reduced MSD.
3. We recommend that the public be made aware of the (MSD) and the additional hazards that they may be exposed to in the event of an unintentional detonation when using the 1 Hazardous Fragment in 600 Square Feet MSD.
4. Prior to conducting OE removal actions at this site a detailed OE Removal Work Plan will need to be developed, reviewed and approved by the appropriate agencies. The work plan will need to include a Community Safety Plan that addresses issues of public safety, coordination, notification and measures to deal with planned evacuations for both unintentional and intentional detonations. The work plan also needs to include a Contingency Action Plan to evaluate the potential for additional OE items discovered that would change the recommended MSD based on the present MPM, and for intentional detonations.
5. If at any time a UXO or a larger MPM is discovered, work must be halted and notifications be made to the appropriate authorities, who must reevaluate the MPM, MSD and the appropriateness of using a 1 Hazardous Fragment in 600 Square feet MSD. This evaluation process would establish new MSD based on the new MPM. A new evaluation and approval for a 1 Hazardous Fragment in 600 Square Feet MSD would need to be completed and be in place before any maximum fragment distance could be reduced.